

## Datasheet: MCA419P

|                      |                                    |
|----------------------|------------------------------------|
| <b>Description:</b>  | RAT ANTI MOUSE IgE HEAVY CHAIN:HRP |
| <b>Specificity:</b>  | IgE HEAVY CHAIN                    |
| <b>Format:</b>       | HRP                                |
| <b>Product Type:</b> | Monoclonal Antibody                |
| <b>Clone:</b>        | LO-ME-3                            |
| <b>Isotype:</b>      | IgG1                               |
| <b>Quantity:</b>     | 0.5 mg                             |

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

|                            | Yes | No | Not Determined | Suggested Dilution |
|----------------------------|-----|----|----------------|--------------------|
| Immunohistology - Frozen   |     |    | ■              |                    |
| Immunohistology - Paraffin |     |    | ■              |                    |
| ELISA                      | ■   |    |                | 500ng/ml           |
| Western Blotting           |     | ■  |                |                    |

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

|                                       |                                                                                  |
|---------------------------------------|----------------------------------------------------------------------------------|
| <b>Target Species</b>                 | Mouse                                                                            |
| <b>Species Cross Reactivity</b>       | Does not react with:Rat                                                          |
| <b>Product Form</b>                   | Purified IgG conjugated to Horseradish Peroxidase (HRP) - liquid                 |
| <b>Preparation</b>                    | Purified IgG prepared by affinity chromatography from tissue culture supernatant |
| <b>Buffer Solution</b>                | Phosphate buffered saline                                                        |
| <b>Preservative Stabilisers</b>       | 0.01% Thiomersal<br>50% Glycerol                                                 |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0 mg/ml                                                      |
| <b>Immunogen</b>                      | Purified IgE from BALB/c mice.                                                   |
| <b>External Database Links</b>        | <b>UniProt:</b>                                                                  |

**Entrez Gene:**

[380792](#)   Gm900   [Related reagents](#)

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fusion Partners</b> | Spleen cells from immunised LOU/c rats were fused with cells of the rat IR983F myeloma cell line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Specificity</b>     | <b>Rat anti Mouse IgE Heavy Chain antibody, clone LO-ME-3</b> recognizes the murine epsilon immunoglobulin heavy chain, and does not cross react with other murine immunoglobulin classes or subclasses. The avidity of Rat anti Mouse IgE Heavy Chain antibody, clone LO-ME-3 is = $3 \times 10^9 \text{M}^{-1}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>References</b>      | <ol style="list-style-type: none"> <li>1. Mojtavavi, N. <i>et al.</i> (2002) Long-lived Th2 memory in experimental allergic asthma. <a href="#">J Immunol. 169 (9): 4788-96.</a></li> <li>2. Stevens, T. <i>et al.</i> (2008) Increased transcription of immune and metabolic pathways in naive and allergic mice exposed to diesel exhaust <a href="#">Toxicol.Sci. 102: 359-70.</a></li> <li>3. Savignac, M. <i>et al.</i> (2010) Increased B cell proliferation and reduced Ig production in DREAM transgenic mice. <a href="#">J Immunol. 185:7527-36.</a></li> <li>4. Bemark, M. <i>et al.</i> (2011) A unique role of the cholera toxin A1-DD adjuvant for long-term plasma and memory B cell development. <a href="#">J Immunol. 186: 1399-410.</a></li> <li>5. Hashimoto, K. <i>et al.</i> (2005) Cyclooxygenase inhibition augments allergic inflammation through CD4-dependent, STAT6-independent mechanisms. <a href="#">J Immunol. 174 (1): 525-32.</a></li> <li>6. Komai, M. <i>et al.</i> (2010) A novel CC-chemokine receptor 3 antagonist, Ki19003, inhibits airway eosinophilia and subepithelial/peribronchial fibrosis induced by repeated antigen challenge in mice. <a href="#">J Pharmacol Sci. 112: 203-13.</a></li> <li>7. Komai, M. <i>et al.</i> (2003) Role of Th2 responses in the development of allergen-induced airway remodelling in a murine model of allergic asthma. <a href="#">Br J Pharmacol. 138: 912-20</a></li> <li>8. Lee, M.Y. <i>et al.</i> (2011) Protective Effects of Mentha haplocalyx Ethanol Extract (MH) in a Mouse Model of Allergic Asthma. <a href="#">Phytother Res. 25(6):863-9.</a></li> <li>9. Niwa, S. <i>et al.</i> (2010) Ovalbumin-induced plasma interleukin-4 levels are reduced in ceramide kinase-deficient DO11.10 RAG1-/- mice. <a href="#">Lipids Health Dis. 9:1.</a></li> <li>10. Hazebrouck, S. <i>et al.</i> (2009) Allergic sensitization to bovine beta-lactoglobulin: comparison between germ-free and conventional BALB/c mice. <a href="#">Int Arch Allergy Immunol. 148: 65-72.</a></li> <li>11. Huang, C.H. <i>et al.</i> (2011) Airway inflammation and IgE production induced by dust mite allergen-specific memory/effector Th2 cell line can be effectively attenuated by IL-35. <a href="#">J Immunol. 187: 462-71.</a></li> <li>12. Kalenda, Y.D. <i>et al.</i> (2015) Tandem repeat recombinant proteins as potential antigens for the sero-diagnosis of <i>Schistosoma mansoni</i> infection. <a href="#">Parasitol Int. 64 (6): 503-12.</a></li> <li>13. Kim, J.H. &amp; Ohsawa, M. (1995) Oral tolerance to ovalbumin in mice as a model for detecting modulators of the immunologic tolerance to a specific antigen. <a href="#">Biol Pharm Bull. 18 (6): 854-8.</a></li> <li>14. Ray, A. <i>et al.</i> (2015) Gut Microbial Dysbiosis Due to <i>Helicobacter</i> Drives an Increase in Marginal Zone B Cells in the Absence of IL-10 Signaling in Macrophages. <a href="#">J Immunol. 195 (7): 3071-85.</a></li> <li>15. Nakano, Y. <i>et al.</i> (2016) Role of Prostaglandin D2 and DP1 Receptor on Japanese Cedar Pollen-Induced Allergic Rhinitis in Mice. <a href="#">J Pharmacol Exp Ther. 357 (2): 258-63.</a></li> <li>16. Jeon, W.Y. <i>et al.</i> (2015) Soshiho-tang water extract inhibits ovalbumin-induced airway inflammation via the regulation of heme oxygenase-1. <a href="#">BMC Complement Altern Med. 15 (1): 329.</a></li> <li>17. Ziegler, T. <i>et al.</i> (2015) A novel regulatory macrophage induced by a helminth molecule instructs IL-10 in CD4+ T cells and protects against mucosal inflammation. <a href="#">J Immunol. 194 (4): 1555-64.</a></li> <li>18. Noble A &amp; Zhao J (2016) Follicular helper T cells are responsible for IgE responses to Der p 1 following house dust mite sensitization in mice. <a href="#">Clin Exp Allergy. May 3 [Epub ahead of print]</a></li> </ol> |

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#### Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

#### Shelf Life

18 months from date of despatch.

#### Health And Safety Information

Material Safety Datasheet documentation #10097 available at: 10097: <https://www.bio-rad-antibodies.com/uploads/MSDS/10097.pdf>

#### Regulatory

For research purposes only

## Related Products

### Recommended Useful Reagents

[AbGUARD® HRP STABILIZER PLUS \(BUF052A\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052B\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052C\)](#)

[TMB CORE \(BUF056A\)](#)

[TMB CORE+ \(BUF062A\)](#)

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